



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/981,817

10/19/2001

Laurent Frouin

1807.1883

7565

5514

7590

07/23/2007

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

NEURAUTER, GEORGE C

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

07/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/981,817	FROUIN, LAURENT	
	<b>Examiner</b>	<b>Art Unit</b>	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/25/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

Claims 1-4 and 6-20 are currently presented and have been examined.

***Response to Arguments***

Applicant's arguments with respect to claims 1-4 and 6-20 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant failed in the response filed 5 June 2006 to specifically show the support within the specification for the amendments made to the claims. The Applicant is requested in future responses to specifically point out the specific page and line and/or paragraph numbers and/or figures where such support for these amendments are disclosed within the specification.

The Applicant also failed in the instant response filed 25 October 2006 to amend the specification to reflect the application numbers that were incorporated by reference. It is requested that any serial number and/or patent numbers associated with these related applications be updated. See MPEP 2001.06(b) and 2004, paragraph 9.

The response to the request for information under 37 CFR 1.105 is considered to be a complete reply.

Art Unit: 2143

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4 and 6-20 are rejected under 35 U.S.C. 101 because claims 1-4 and 6-20 recite search signals that contain "information representing technical features of a host to be actuated" as recited in claim 1, signals that represent "operating commands" as recited in claims 6 and 7, "technical features indicated in a received search signal" as recited in claim 13, a "search signal containing information representing technical features of a host to be actuated", instruction signals for "instructing to search for an apparatus possessing a predetermined technical feature" as recited in claim 17, and an instruction signal for "instructing to search for an apparatus possessing the predetermined technical feature" as recited in claim 20. Signals encoded with functional descriptive material are not currently considered to be statutory subject matter since a signal encoded with functional descriptive material does not fall under any of the four statutory classes. See ANNEX IV "Computer-Related Nonstatutory Subject Matter", section (c) "Electro-Magnetic Signals" of the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter

Art Unit: 2143

Eligibility", released 22 November 2005 in the Official Gazette ("Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101...These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.")

### ***Claim Interpretation***

The Examiner emphasizes for the record that the claims employ broad language including the use of words and phrases such as "node", "host", "subnetwork", "search signal", "technical features", "operating commands", and "starting up" or "actuating" a host, which have broad meanings in the art and have multiple embodiments and interpretations that extend well beyond the scope of the specification. In addition, the Applicant has not argued any narrower interpretation of the claim language, nor amended the claims significantly enough to construe a narrower meaning to the limitations.

Since the claims breadth allows multiple interpretations, meanings, and embodiments, which are broader than Applicant's disclosure, the Examiner is required to interpret the claim limitations in terms of their broadest reasonable interpretations while determining patentability of the disclosed

Art Unit: 2143

invention. See MPEP 2111. In other words, the claims must be given their broadest reasonable interpretation consistent with the specification and the interpretation that those skilled in the art would reach. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000), *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and *In re American Academy of Science Tech Center*, 2004 WL 1067528 (Fed. Cir. May 13, 2004).

Any term that is not clearly defined in the specification must be given its plain meaning as understood by one of ordinary skill in the art. See MPEP 2111.01. See also *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003), *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003).

The interpretation of the claims by their broadest reasonable interpretation reduces the possibility that, once the claims are issued, the claims are interpreted more broadly than justified. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). Also, limitations appearing in the specification but not recited in the claim are not read into the

Art Unit: 2143

claim. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the failure to significantly narrow definition or scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. Such broad interpretation is shown in the rejections listed below.

The elements "node", "host", "subnetwork", "search signal", "technical features", "operating commands", and "starting up" or "actuating" a host defined within the specification and recited in claims 1-4 and 6-20 will be given its broadest reasonable interpretation and will be interpreted by the Examiner that is consistent with the disclosures of the specification and the interpretation that those skilled in the art would reach. See MPEP § 2111.

Claims 1-4 recite the conjunction "if" when reciting steps in conjunction with a conditional step. In view of the broadest reasonable interpretation of the claims as required by MPEP 2111, these limitations may be interpreted in the sense that the limitations occur when the condition step occurs, but also introduces the possibility that the conditional step may not occur, thereby rendering the limitation to be not positively recited. Since the claim fails to recite any specific

Art Unit: 2143

limitations regarding the possibility that the conditional step may not occur, the broadest reasonable interpretation of the claim allows for the possibility wherein no functionality is achieved when the conditional step is not achieved. Therefore, the above interpretation has been considered during the examination of the claims. If the Applicant wishes the limitations to be positively recited, the claims must be amended to either recite limitation in the case wherein the conditional step does not occur or remove such a case from consideration.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-20 are rejected under 35 U.S.C. 102(b) as being anticipated by "IRC-38 Infrared Receiver Product Information" ("IRC-38").

Regarding claim 1, "IRC-38" disclosed a method of managing a communication network comprising a sub-network having communication nodes interconnected by link conveying digital signals, and a plurality of hosts, said hosts being able to



Art Unit: 2143

exchange data via the sub-network, said communication nodes comprising data and control interfaces for exchanging data and operating commands with hosts to which they are connected, the method comprising the steps of:

transmitting a search signal from a first communication node to a second communication node of the sub-network, said search signal containing information representing technical features of a host to be actuated from said first communication node, the transmission being performed in accordance with instructions from a remote control; (page 1, specifically "The IRC-38 Infrared Receiver receives infrared codes from a source remote control...")

identifying a candidate host, that is connected to said second communication node and that has technical features compatible with the technical features contained in the search signal; starting up said candidate host by means of the control interface of the second communication node to which the candidate host is connected, wherein, based on the result of the starting up, if said candidate host proves not to be the host to be actuated, a search signal is transmitted once again in order to continue the search, whereas, if said host does prove to the host to be actuated, operating commands are sent to it by means of said control interface, which also interrupts the search.

Art Unit: 2143

(page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it. For example, if it sees a Sony Power On...")

Regarding claim 2, "IRC-38" disclosed the method according to claim 1, wherein if the data interface of the candidate host is adapted to exchange analogue data signals then the compatibility of the technical features contained in the search signal is determined with regard to the technical features of said data interface. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

Regarding claim 3, "IRC-38" disclosed the method according to claim 1, wherein the steps of transmitting, identifying, and starting up are repeated until the identification of two hosts

Art Unit: 2143

that do prove to be the hosts to be actuated, in order to put said two hosts into communication. (page 1, specifically "Adaptable to almost any type of serial or TTL controllable device")

Regarding claim 4, "IRC-38" disclosed the method according to claim 3, wherein the two hosts put into communication are connected to the same communication node. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output...you can use almost any remote to control it. For example, if it sees a Sony Power On....If it sees an NEC code structure...Adaptable to almost any type of serial or TTL controllable device")

Regarding claim 6, "IRC-38" disclosed a communication node that forms part of a communication network comprising a sub-network having communication nodes interconnected by links conveying digital signals, and a plurality of hosts able to exchange data via the sub-network, said node comprising:

At least one data interface for connection to a host to exchange signals; ("RS-232" (Serial)" or "TTL")

At least one control interface to transmit operating commands to the host; and a unit for supplying signals representing these operating commands received from other nodes

Art Unit: 2143

to said control interface, wherein said unit supplies the signals based on the data interface connected to the host. (page 1, specifically "page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals)

Regarding claim 7, "IRC-38" disclosed a communication node that forms part of a communication network comprising a sub-network having communication nodes interconnected by links conveying digital signals, and a plurality of hosts to exchange data via the sub-network, said node comprising;

At least one receiver to receive operating commands intended for any host in the network; and a unit to produce signals representing these operating commands and being transmitted to other nodes, wherein said unit produces the signals based on a technical feature of the host. (page 1, specifically "page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes

Art Unit: 2143

from a source remote control and converts them to output signals)

Claims 8 and 9 are rejected since the claims recites a data processing apparatus and communication network that contain substantially the same limitations as recited in claims 6 and 7.

Regarding claim 10, "IRC-38" disclosed the communication network according to claim 9, wherein said data represent audio-visual information. (page 1, specifically "Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it. For example, if it sees a Sony Power On...")

Claims 11 and 12 are rejected since the claims recite a data storage means that contains substantially the same limitations as recited in claims 1, 2, and 5.

Regarding claim 13, "IRC-38" disclosed a communication node that forms part of a communication network comprising a sub-network consisting of communication nodes interconnected by links conveying signals, and a plurality of hosts being able to exchange data via the sub-network, said node comprising:

means for comparing technical features indicated in a received search signal with technical features of a host to which said node is connected; and a control interface that

Art Unit: 2143

starts up and operates said host based on a comparison result by the comparing means. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

Regarding claim 14, "IRC-38" disclosed a communication node according to Claim 13, further comprising:  
at least one data interface for connecting a host to exchange analog signals and to receive operation commands from said control interface; and a unit for supplying said control interface with received signals which represent these operating commands. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

Art Unit: 2143

Regarding claim 15, "IRC-38" disclosed a communication node that forms part of a communication network comprising a sub-network consisting of communication nodes interconnected by links conveying digital signals, and a plurality of hosts to exchange data via the sub-network, said node comprising:

means for transmitting to all nodes in the network a search signal containing information representing technical features of a host to be actuated; and means for sending operating commands to said host to be actuated. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

Regarding claim 16, "IRC-38" disclosed a communication node according to Claim 15, further comprising:

at least one receiver to receive operating commands intended for said host to be actuated; and a unit to produce signals representing the operating commands. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232

Art Unit: 2143

(Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals..."

Regarding claim 17, "IRC-38" disclosed a communication apparatus comprising:

a wireless communication means for wirelessly communicating with another wireless communication apparatus; a wired communication means for communicating with another apparatus; receiving means for receiving, by said wireless communication means, instruction signals for instructing to search for an apparatus possessing a predetermined technical feature; and searching means for searching, by said wired communication means, the apparatus possessing the predetermined technical features based on the received instruction signal. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")



Art Unit: 2143

Regarding claim 18, "IRC-38" disclosed the communication apparatus according to Claim 17, further comprising controlling means for controlling the apparatus searched by said searching means. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output... Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

Regarding claim 19, "IRC-38" disclosed the communication apparatus according to Claim 17, wherein said controlling means operates the searched apparatus by an operating command. (page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output... Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it. For example, if it sees a Sony Power On...")

Regarding claim 20, "IRC-38" disclosed a method for searching for an apparatus possessing a predetermined technical feature by a communication apparatus, comprising:

Art Unit: 2143

a wireless receiving step of wirelessly receiving an instruction signal for instructing to search for an apparatus possessing the predetermined technical feature; and a searching step of searching for the apparatus possessing the predetermined technical feature based on the received instruction signal.

(page 1, specifically "The IRC-38 Infrared Receiver allows an infrared remote control...to control equipment using either RS-232 (Serial) output, TTL (motors, switches) output...the IRC-38 Infrared Receiver receives infrared codes from a source remote control and converts them to output signals...Now also available with off the shelf code set which recognizes Sony, NEC, and RC5 infrared code structures...so you can use almost any remote to control it.")

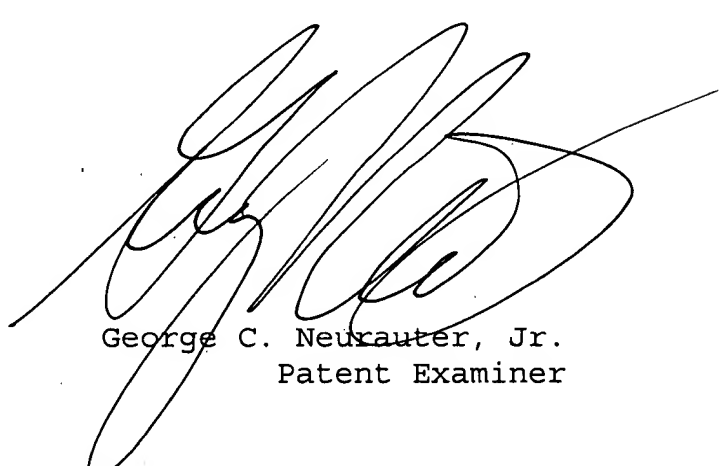
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is 571-272-3918. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



George C. Neurauter, Jr.  
Patent Examiner